

Ship Oct. 29

# Work Order ID 63068

Tuesday, October 19, 2010 3:33:36 PM



Page 1

Item ID:	D4073-3	Accept		Setup	Start	
Revision ID:						
Item Name:	Door Hinge Backing Plate				Stop	
Start Date:	10/19/2010	Start Qty:	2.00			
Required Date:	10/26/2010	Req'd Qty:	2.00			
Reference:						

Approvals:	Process Plan:		Date:	10/10/19	Tooling:		Date:	
	QC:		Date:		SPC (Y/N):		Date:	

Run	Start	
	Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4073	A								

100 0.00



Waterjet  
FLOW CNC Waterjet

6661 .663

## Memo

1-Cut as per Dwg  
Dwg Rev:   
Prog Rev:

2-Deburr if necessary

0.00

FB10-10-21

3

110 0.00



QC  
Quality Control

QC2- Inspect parts off machine FAI/FAIB

## Memo

0.00

FB10-10-21

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 63068

Tuesday, October 19, 2010 3:33:36 PM



Page 2

Item ID:	D4073-3	Accept		Setup	Start	
Revision ID:						
Item Name:	Door Hinge Backing Plate				Stop	
Start Date:	10/19/2010	Start Qty:	2.00			
Required Date:	10/26/2010	Req'd Qty:	2.00			
Reference:						
				Cust Item ID:		
				Customer:		

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 	QC8- Inspect parts - second check	0.00							
QC Quality Control	Memo JM-03	0.00				3			10-10-21
130 	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish Hand Finishing	Memo	0.00				X3	9		
140 	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
Powdercoat Powder Coating	Memo POWDER COAT: Start Time: 3:40 Oven Temperature: 320° Finish Time: 4:10	0.00				3			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, October 19, 2010 3:33:40 PM

Page 1

Work Order ID: 63068



Parent Item: D4073-3



Parent Item Name: Door Hinge Backing Plate

Start Date: 10/19/2010

Required Date: 10/26/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 10.06.08 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6S.063

Purchased

No

100

sf

52.4340

0.02777

0.058463

.1



1810-10-21

6061-T6 .063 Sheet

Location

Loc Qty

Loc Code

MAT21

52.434

113608

52.434

113608

(3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DART AEROSPACE LTD	Work Order:	63068
Description: DOOR HINGE BAKING PLATE	Part Number:	D4073-3
Inspection Dwg: D4073- Rev: A		Page 1 of 1

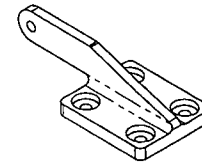
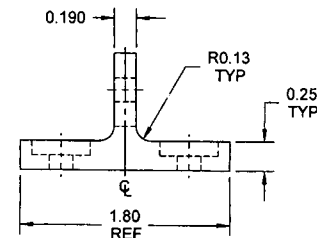
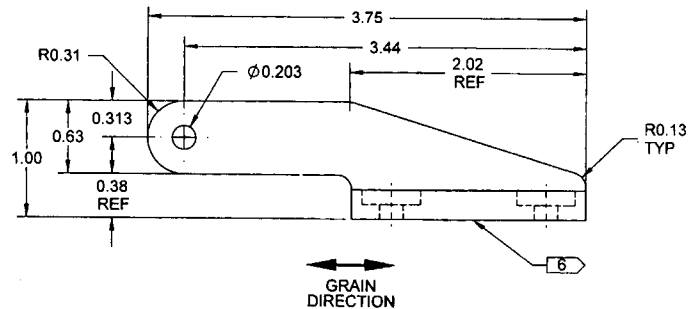
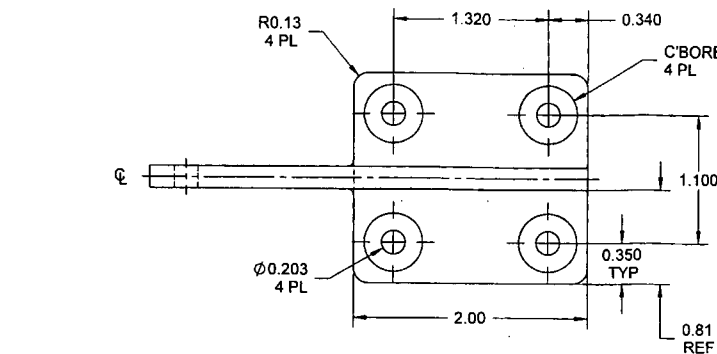
## FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article    ☐ Prototype

[illegible]

Measured by:	B	Audited by:		Prototype Approval:	N/A
Date:	10-10-21	Date:	10/10/21	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *63008*  
*2/10/19*

# D4073-1 DOOR HINGE

RELEASED  
2010-09-03  
JH

## NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.11 lbs

A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	140	DRAWING NO.	REV. A
MFG. APPR.	21	D4073	SHEET 1 OF 2
APPROVED	140	TITLE	SCALE
DE APPR.	140	DOOR HINGE	NTS
DATE	10.09.16	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

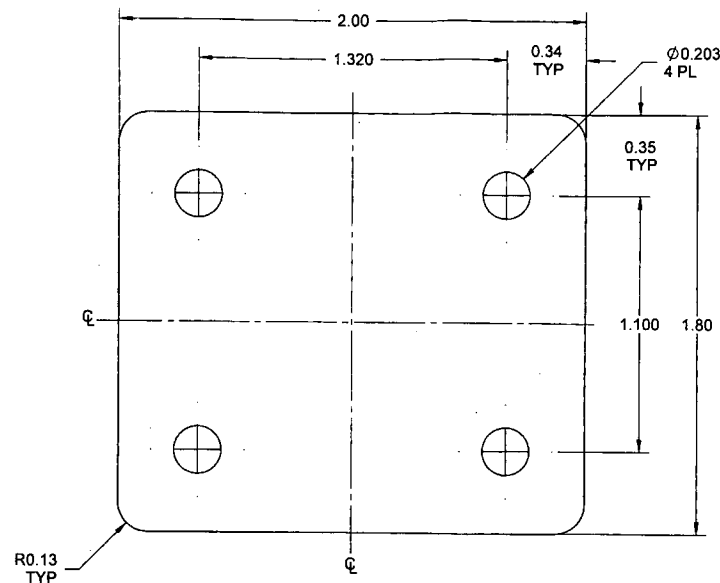
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4073-3 DOOR HINGE BACKING PLATE**

**NOTES:**

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.063 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027  
OR ASTM B209  
REF DART SPEC M8061T6S.063
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.02 lbs

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RF	D4073	SHEET 2 OF 2
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	DOOR HINGE	NTS
DATE	10.09.16	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

**RELEASED**  
2010-09-23  
NND

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

## Receiving Report

Date: 10/01/11  
 Supplier: MAGNO

Batch No: M113608  
 Dart P/O: 11060

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☒ N/A ☐  
 Shipment Complete: Yes ☒ No ☐ N/A ☒  
 QC6 Inspection ☒ S N/A ☒  
 Work Order 1 10/01/11 N/A ☒

**Discrepancies**

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 PU

Production/Admin: 10/01/11  
 Date  
 Received/Costing    
 Initial  

Location

# Purchase Order Receipt Listing

January 11, 2010 8:56:50 AM

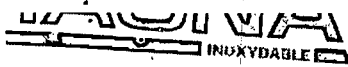
Page 1 of 1

All amounts are calculated in domestic currency.

Vendors PO ID PO11060 Receipt Dates from 1/11/2010 to 1/11/2010 All Line Item Types  
 Item ID/GL/WOs All Rec. Employees All Currencies  
 Grouped by Vendor ID

Purchase Order ID/ Order Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M/ Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor Name		VC-MAG002	Magna Stainless								
PO11060	2		M6061T6B00750X00 f .125		1/11/2010	1/11/2010	80.0000	\$0.25	0.0000	0	\$20.00 ✓
	No		6061-T6 Bar .750 x f .125		80.0000	Stores		\$20.00	0.0000	0	
			113608								
	3		M6061T6B2.000X01. f 250		1/11/2010	1/11/2010	40.0000	\$11.08	0.0000	0	\$443.20 ✓
	No		6061-T6 Bar 2.00 x f 1.25		24.0000	Stores		\$443.20	0.0000	0	
			113608								
	4		M6061T6S.125 sf		1/11/2010	1/11/2010	96.0000	\$5.94	0.0000	0	\$570.00 ✓
	No		6061-T6 .125 Sheet sf		96.0000	Stores		\$570.00	0.0000	0	
			113608								
	5		M6061T6S.063 sf		1/11/2010	1/11/2010	288.0000	\$4.53	0.0000	0	\$1,304.99 ✓
	No		6061-T6 .063 Sheet sf		256.0000	Stores		\$1,304.99	0.0000	0	
			113608								

Total Received Quantity: 504.0000  
 Total Qty to Inspect (PO U/M): 0.0000  
 Total Reject Quantity: 0.0000  
 Total Receipt Value: \$2,338.19  
 Total Balance Due Quantity: 0.0000



magna Stainless

5775 Kieran St, Saint-Laurent, Quebec H4S 0A3  
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105



# PACKING LIST

Page 1 of 1

I021555

SPECIAL INSTRUCTIONS



TO: AEROSPACE LTD  
0 ABERDEEN STREET

SHIP TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET

KESBURY  
1K7  
Contact: CHANTAL

HAWKESBURY  
K6A 1K7  
Ship Terms: PREPAID

Currency	Sales Person	Customer Phone	Customer Fax	Customer PO	
CANADIAN DOLLARS	ERYCK BLAIS	(613) 632-5200	(613) 632-1053	PO11060	
Order	Terms	Ship Via	Date Ordered	Date Required	Date Shipped
3590	NET 30 DAYS	NIR:R-557065-1	01/07/10	01/11/10	01/11/10

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
4		PC	ALUMINUM FLATS AFL 6061 T6 1/8" x 3/4" x R/L			
2		PC	AFL 6061 T6 1-1/4" x 2" x R/L 20' 9 LB / 4 PC	L026372	07C043	4
			20' 118 LB / 2 PC	L030399	46512	2
3		PC	ALUMINUM SHEET ASH 6061 T6 .125" x 48" x 96"			
6		PC	ASH 6061 T6 .063" x 48" x 144" 173 LB / 3 PC	L031565	329280101	3
			NO N/A MAT'L 261 LB / 6 PC	L025694	K05406A	6
Approx Weight: 561 LB						

*Handwritten signature*

Skids: 1

by: Date:





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

\*\*\*PO REPRINT\*\*\*

Purchase Order ID PO11060

Purchase Order Date 1/07/10

PO Print Date 1/07/10

Page Number 2 of 2

Order From :

VC-MAG002

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

Contact Name

Vendor Phone 800 363 6646

Vendor Fax 514 339 1105

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms

Net 30

Currency

CAD

FOB

ALUMINUM SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11 OR AMS 4025  
AMS 4027 OR ASTM B209

5 M6061T6S.063

6061-T6 .063 Sheet

1/11/10

256.00

Yours ppd

\$4.5312

\$1,159.99

Yes

sf

Special Inst:

MATERIAL SAME AS ABOVE

6 M2024T3S.080

2024-T3 .080 sheet

1/15/10

196.00

Yours ppd

\$10.9375

\$2,143.75

Yes

sf

Special Inst:

MATERIAL: 2024-T3 ALUMINUM  
SHEET  
AS PER QQ-A-250/4 OR AMS-QQ-  
AA-250/4 OR  
AMS 4037 OR ASTM B209

7 M7075T6B1.000X1.000

7075 T6 BAR 1.00 x1.00

1/15/10

12.00

Yours ppd

\$16.2500

\$195.00

Yes

f

Special Inst:

MATERIAL: 7075-T6/T651/T6511/T62  
ALUMINUM BAR PER AMS-QQ-A-  
225/9 OR AMS 4122/4123/4186/4187  
OR  
PER AMS-QQ-A-200/11

M304TS0.750W.049

304 SQ Tube  
.75x.75x.049W

1/15/10

100.00

Yours ppd

\$3.2500

\$325.00

Yes

f

Special Inst:

MATERIAL: 304 SEAMLESS  
SQUARE TUBING NO MILL FINISH

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

PO Total:

\$4,831.66

Change Nbr: 2

Change Date: 1/07/10

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Novelis Inc.  
1 LAPPAN'S LANE,  
P.O. BOX 2000  
KINGSTON, ONTARIO, CANADA K7L4Z5

CERTIFICATION OF PROPERTIES AND  
CHEMICAL ANALYSIS

SOLD TO:  
MANDEL METALS INC  
11400 ADDISON STREET

SHIP TO:  
MANDEL METALS INC  
11400 ADDISON STREET

FRANKLIN PARK IL  
60131

FRANKLIN PARK IL  
60131

PRINT DATE:  
2009/04/17

CUST PO: 02-11832

CUST PART #:

LOAD: H284

PACK: 52644221

COIL:

ALLOY: 6061

TEMPER: T6

GAUGE:

K05406A

0.0630

in

SALES ORDER: 66515340-0010

NET WT: 9237 lbs

WIDTH: 48.000 in


MECHANICAL SPECIFICATIONS:

AMS-QQ-A-250/11-97 ASTM B209-02 AMS4027M

GAUGE LENGTH = 2.00 in

I certify that the materials detailed herein have been tested and that  
documentary evidence of the test or release certificate is on file.

Per

  
Process Leader

Location: FRONT END		UOM	TEMPER	TEST DATE
UTS	T:45.95	ksi	T6	17-APR-2009
YTS	T:38.17	ksi	T6	17-APR-2009
Elongation	T:13	%	T6	17-APR-2009
Tensile Thickness	T:0.0604	in	T6	17-APR-2009
Location: BACK END				
UTS	T:44.08	ksi	T6	17-APR-2009
YTS	T:37.08	ksi	T6	17-APR-2009
Elongation	T:12	%	T6	17-APR-2009
Tensile Thickness	T:0.0609	in	T6	17-APR-2009

Chemistry

\*\*\*\*\* LAYER: 01 \*\*\*\*\*

Al 97.6900 Si 0.5500 Fe 0.4600 Cu 0.2200 Mn 0.0100 Mg 0.8800 Cr 0.1700 Ni 0.0000 Zn 0.0100  
Ti 0.0100 Be 0.0000 Pb 0.0000  
EACH: 0.0000 TOTAL: 0.0000

P064379